

REMARKS

After entry of the present Amendment, claims 1-21 are pending in the subject application. Claims 1-4 are currently amended to recite that the liquid silicone rubber base comprises (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule and a viscosity at 25 °C not less than 100 mPa·s and not more than 100,000 mPa·s and (a-4) a reinforcing filler. Support for this claim amendment can be found at least in original claims 1-4 as well as at least in paragraphs [0008]-[0011] of the subject application as published, i.e., U.S. Publ. Pat. Appln. No. 2008/0021125. Claims 1 and 4 are currently amended in view of the amendment to claims 1-4 to recite a proper weight basis of components (B¹), (C) and (b-1). Support for this claim amendment can be found at least in original claims 1 and 4 as well as at least in paragraphs [0008] and [0011] of the subject application as published. Claim 19 is currently amended merely for purposes of correcting antecedent basis. Claim 21 is new and recites steps by which the silicone rubber sponge is produced. Support for new claim 21 can be found at least in paragraph [0033] of the subject application as published. As such, no new matter is introduced via the present Amendment. No claims are cancelled or withdrawn.

Claims 1-11 and 14-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 4,248,751 to Willing (the '751 patent) in view of U.S. Pat. No. 4,221,688 to Johnson et al. (the '688 patent). In view of the Applicants' amendment of independent claim 1, as well as the reasons set forth below, the Examiner's rejection is respectfully overcome.

In particular, the Examiner contends that the '751 patent discloses an emulsion comprising a vinyl end-blocked polydiorganosiloxane and an organosilicon compound having silicon-bonded hydrogen atoms with water and a surfactant, and further with a platinum catalyst.

However, as a preliminary matter, the Applicants note that, in view of the present Amendment, a reinforcing filler is present in the instantly claimed silicone rubber sponge emulsion composition. The '751 patent fails to disclose an emulsion including a reinforcing filler. While the Applicants recognize that the Abstract of the '751 patent references colloidal silica, the '751 patent explicitly states that colloidal silica may be added to the latex formed from the emulsion, not the emulsion itself. Not only does the '751 patent require that colloidal silica be added to the latex and not the emulsion, but the '751 patent also states that it should only be added for producing "tougher coatings for substrates." Specifically, column 3, lines 53-57 of the '751 patent states that "[t]o produce stronger films or coatings, a colloidal silica . . . can be added to the crosslinked silicone latex after the heating step." (emphasis added). As such, there is no disclosure, teaching, or even suggestion in the '751 patent to include a reinforcing filler in an emulsion, as expressly claimed in the subject application. This is not surprising considering the '751 patent is directed toward a latex for producing coatings, rather than a silicone rubber sponge, as claimed in the subject application.

The Examiner also relies on the Example of the '751 patent and contends that this Example discloses an emulsion formed from combining 8 parts of surfactant, 4 parts of water, and 40 parts of a siloxane mixture of surfactant in water. Interestingly, the Examiner notes in parenthesis that the emulsion of the Example of the '751 includes "5 percent of the water-soluble polymer." The Applicants are confused as to what the Examiner intended to convey by asserting that the Example of the '751 patent includes "5 percent of the water-soluble polymer." Notably, the '751 patent fails to disclose, teach, or even suggest a water soluble polymer altogether, let alone include such a water soluble polymer in its Example. While the Applicants appreciate that

the emulsion of the Example of the ‘751 patent includes trimethylnonylpolyethylene glycol ether, the Applicants respectfully note that this component is a nonionic surfactant (and is even referred to as such in the ‘751 patent), not a water soluble polymer. In fact, the Examiner even admits that the ‘751 patent “does not specifically disclose the use of a water-soluble polymer.” (see page 4, paragraph 7 of the instant Office Action).

As introduced immediately above, the Examiner expressly admits that the primary reference, i.e., the ‘751 patent, fails to disclose a water-soluble polymer. To address this deficiency of the ‘751 patent, the Examiner relies on the ‘688 patent, and contends that the ‘688 patent discloses thickeners, such as sodium salts of polyacrylates, which can be included in emulsions to form elastomers. As such, the Examiner opines that one of skill of the art would be motivated to add the sodium salt of a polyacrylate of the ‘688 patent to the composition of the ‘751 patent for the benefit of improving handling characteristics.

The Examiner is respectfully reminded that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The Applicants note that claimed component (B¹) is an **aqueous solution of (b-1) a water-soluble polymer**. The ‘688 patent fails to disclose an aqueous solution of a water-soluble polymer as expressly claimed in the subject application.

As such, the Applicants submit that even a combination of the ‘751 patent and the ‘688 patent fails to disclose the instantly claimed silicone rubber sponge emulsion. Specifically, even if the water-soluble polymer of the ‘688 patent was included in the emulsion of the ‘751 patent, the emulsion so formed is different from the instantly claimed silicone rubber sponge emulsion. Not only are the emulsions of these references utilized to form coatings or films, rather than a silicone

rubber sponge, as claimed in the subject application, but neither of these references teaches, discloses, or even suggests an aqueous solution of a water soluble polymer.

As the Examiner is aware, it remains a fundamental tenet of the obviousness analysis that reference(s) relied upon to establish an obviousness rejection must teach or suggest each and every feature of a claim. In particular, MPEP § 2143.03 requires the “consideration” of all words in a claim in an obviousness determination. However, to render a claim unpatentable, the Examiner must do more than merely “consider” each and every feature of the claim. In particular, the asserted reference(s) must also teach or suggest each and every claim feature. See *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) (to establish prima facie obviousness of a claimed invention, all the claim features must be taught or suggested by the prior art). Indeed, a proper obviousness determination requires that an Examiner make “a searching comparison of the claimed invention - *including all its limitations* - with the teaching of the prior art.” See *Ex parte Wada and Murphy*, Appeal 2007-3733, (citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995)) (emphasis in original). This is supplemented by MPEP § 904, which states that the Examiner’s search “should cover the invention as described and claimed.” These principles remain unchanged by the decision in *KSR Int’l Co. v. Teleflex Inc.* As such, because even a combination of the ‘751 patent and the ‘688 patent fails to disclose each and every feature of the claimed silicone rubber emulsion, the Examiner’s rejection under § 103(a) is respectfully traversed. Specifically, including the water soluble polymer of the ‘688 patent in the emulsion of the ‘751 patent, as suggested by the Examiner, does not produce an emulsion which includes either a reinforcing filler or an aqueous solution of a water soluble polymer, let alone both of these components, as expressly claimed in the subject application.

While not necessary to the Applicants traversal of the Examiner's rejection, the Applicants note that merely adding a water soluble polymer to an emulsion does not inherently produce an aqueous solution of the water-soluble polymer within the emulsion. As such, even if one of skill in the art were to incorporate the water-soluble polymer of the '688 patent in the emulsion of the '751 patent, the emulsion so formed would be different from the instantly claimed emulsion. Specifically, the water-soluble polymer would not necessarily form an aqueous solution in the aqueous phase of the emulsion, which impacts the physical properties of the silicone rubber sponge emulsion and the silicone rubber sponge formed therefrom.

Claims 12-13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the '751 patent and the '668 patent and further in view of U.S. Pat. No. 4,427,811 to Elias et al. (the '811 patent). While the Applicants recognize this rejection relates to dependent claims only, the Applicants wish to note the Examiner has failed to properly establish a proper facie case of obviousness with respect to the subject matter of these claims.

Specifically, the Examiner contends that the '751 patent discloses that "the cured product may further be heated." This is not the case. The '751 patent states, in column 4, lines 4-8, that "[t]he evaporation is not limited to that evaporation resulting from unattended exposure of a deposit of latex to the atmosphere. Evaporation may additionally be assisted by a flow of dry air or other gas, either at ambient temperature or at an elevated temperature." Therefore, the '751 patent is clearly describing the method by which the water is evaporated from the emulsion. The '751 patent fails to disclose, teach, or even suggest heating the cured product, which is formed from the step of curing the silicone rubber sponge emulsion, at 120°C to 250°C, as claimed in

claim 12. The Examiner's new secondary reference, i.e., the '811 patent, does not cure this deficiency.

The Examiner contends that the '811 patent heat-ages its compositions post-curing, and one skilled in the art would be motivated to heat-age the composition for the benefit of testing the durability of the composition. However, the Applicants note that the step of heating the cured product in the instant claims is not merely to test the durability of the composition, but rather to form the silicone rubber sponge. Upon a full reading of the '811 patent, one of skill in the art would have no reason whatsoever to think that a step for testing the durability of a composition should be utilized to produce a silicone rubber sponge emulsion. This is not surprising considering the '811 patent teaches a method for producing a silicone elastomeric film, not a silicone rubber sponge. The '811 patent heats a wholly different products for a wholly different purpose than the instantly claimed step of heating the cured product to form a silicone rubber sponge.

In view of the foregoing, the Applicants respectfully submit that claims 1-21 are both novel and non-obvious over the prior art, including the '751 patent, the '688 patent, and the '811 patent, either individually or in combination. As such, the Applicants submit that the claims are in condition for allowance, and such allowance is respectfully requested.

This Amendment is submitted along with the proper fee for a one-month extension of time; thus, it is believed that no additional fees are due. However, if necessary, the Commissioner is authorized to charge Deposit Account No. 08-2789 in the name of Howard & Howard Attorneys PLLC for any additional fees or to credit the account for any overpayment.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS PLLC

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